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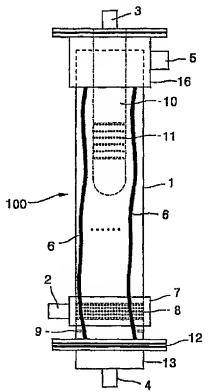
(54) Title: FINE FILTERING APPARATUS CONTROLLABLE PACKING DENSITY USING FLEXIBLE FIBER



(57) Abstract: An apparatus for effectively filtering and separating fine floc, algae, suspended solids, etc. remaining in water after biological and physiochemical treatment is provided. The fine filtering apparatus includes flexible fibers that control packing density, thus improving filtration efficiency, the amount of clarified water, and filtering duration, and reducing power consumption compared to a conventional filtering apparatus is provided. In the filtering apparatus, flexible fibers having an effective diameter of 1 to 60 μm and which are flexible, elastic, and have proper surface roughness extend in the longitudinal direction of the apparatus. A jacket shaped unit for supplying source water (supplied water) has a porous structure. Clarified water (treated water) is discharged through a central porous chamber. The whole filter media layer can be utilized as a particle-entrapping space.

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